

# clarion®

*Owner's manual  
Mode d'emploi  
Manual de instrucciones  
Istruzioni per l'uso*

# M455

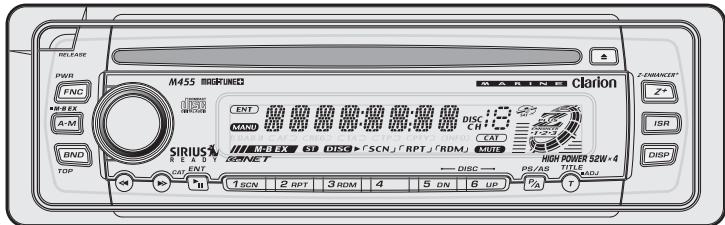
MARINE AM/FM/CD MULTIMEDIA CONTROLLER

COMBINÉ NAUTIQUE RADIO AM/FM-LECTEUR CD  
MULTIMEDIA

CONTROLADOR MULTIMEDIA MARINO  
DE AM/FM/DISCOS CD

UNITÀ DI CONTROLLO MULTIMEDIALE PER USO  
MARITTIMO AM/FM/CD

*e*NET



COMPACT  
DISC  
DIGITAL AUDIO

SIRIUS  
READY

Thank you for purchasing this **Clarion** product.

- \* Please read this owner's manual in its entirety before operating this equipment.
- \* After reading this manual, be sure to keep it in a handy place (e.g., glove compartment).
- \* Check the contents of the enclosed warranty card and keep it with this manual.
- \* This manual includes the operating procedures of the CD changer, Sirius satellite and TV tuner connected via the CeNET cable. The CD changer, Sirius satellite and TV tuner have their own manuals, but no explanations for operating them are described.

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## 1. FEATURES

- Pelgan Z® Conformal Coated PCB and Microprocessor
- Rotary Volume Control
- High Definition Positive LC Display
- Spring Loaded Silicon Oil Damped Suspension
- CD-R/CD-RW Compatible
- Z-Enhancer+ Equalizer
- Magna Bass EX
- Magi-Tune+® Tuner with 6 AM/18FM Presets
- Detachable Control Panel
- 2-Channel RCA Audio Auxiliary Input
- 4-Channel RCA Audio Output (Front/Rear)
- 4-Channel Speaker Output (52W x 4 Max)

## 2. PRECAUTIONS

1. When it is very cold in the boat and the unit is used soon after switching on the heater, the disc and the optical components may become fogged and not operate properly. Wipe fogged discs with a soft cloth. Fogged optical components will naturally return to normal when the unit is left for about one hour, after which it will operate normally.

2. When the boat is underway in rough water the CD may skip as a result of intense vibrations and shock.
3. This unit uses a precision mechanism. Even in the event that trouble arises, never open the case, disassemble the unit, or lubricate the rotating parts.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to consult the dealer or an experienced radio/TV technician for help.

### CAUTION

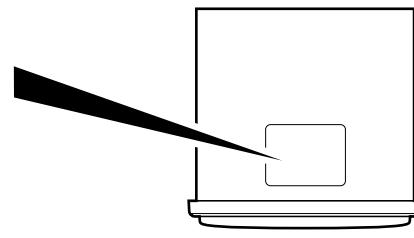
USE OF CONTROLS, ADJUSTMENTS, OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN, MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

THE COMPACT DISC PLAYER and MINI DISC PLAYER SHOULD NOT BE ADJUSTED OR REPAIRED BY ANYONE EXCEPT PROPERLY QUALIFIED SERVICE PERSONNEL.

CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE MANUFACTURER FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

### INFORMATION FOR USERS:

CHANGES OR MODIFICATIONS TO THIS PRODUCT NOT APPROVED BY THE MANUFACTURER WILL VOID THE WARRANTY AND WILL VIOLATE FCC APPROVAL.



Bottom View of Source Unit

## Handling Compact Discs

### English

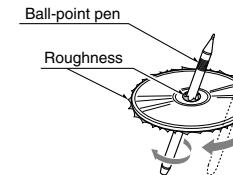
Use only compact discs bearing the mark.

Do not play heart-shaped, octagonal, or other specially shaped compact discs.

Some CDs recorded in CD-R/CD-RW mode may not be usable.

### Handling

- Compared to ordinary music CDs, CD-R and CD-RW discs are easily affected by high temperature and humidity. Prolonged exposure to high heat and humidity may make the discs unplayable. Therefore, do not leave them for a long time in the boat.
- New discs may have rough edges. If such discs are used, the player may not work, or the sound may skip. Use a ball-point pen or the like to remove any roughness from the edge of the disc.
- Never stick labels on the surface of the compact disc or mark the surface with a pencil or pen.
- Never play a compact disc with any cellophane tape or other glue on it or with peeling off marks. If you try to play such a compact disc, you may not be able to get it back out of the CD player or it may damage



the CD player.

- Do not use compact discs that have large scratches, are misshapen, cracked, etc. Use of such discs may cause misoperation or damage.
- To remove a compact disc from its storage case, press down on the center of the case and lift the disc out, holding it carefully by the edges.
- Do not use commercially available CD protection sheets or discs equipped with stabilizers, etc. These may damage the disc or cause breakdown of the internal mechanism.

### Storage

- Do not expose compact discs to direct sunlight or any heat source.
- Do not expose compact discs to excess humidity or dust.
- Do not expose compact discs to direct heat from heaters.

### Cleaning

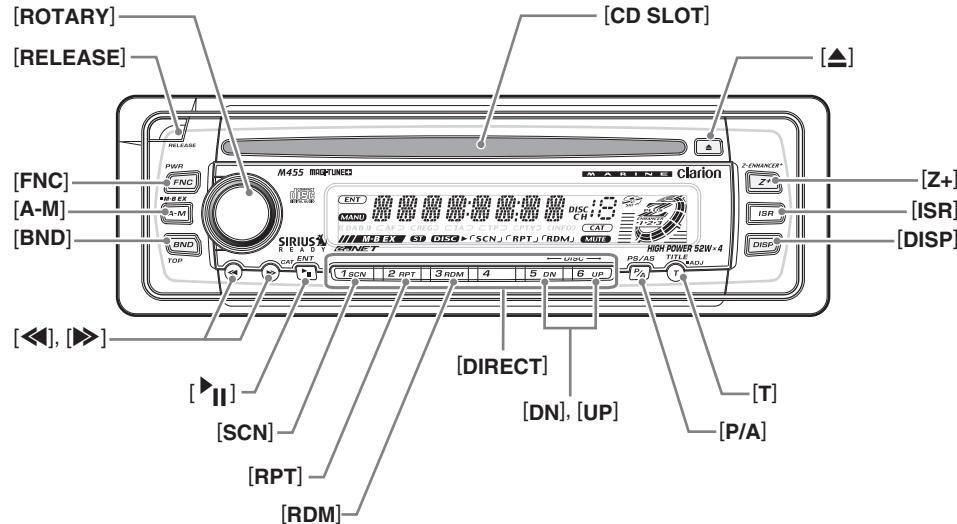
- To remove fingermarks and dust, use a soft cloth and wipe in a straight line from the center of the compact disc to the circumference.
- Do not use any solvents, such as commercially available cleaners, anti-static spray, or thinner to clean compact discs.
- After using special compact disc cleaner, let the compact disc dry off well before playing it.

Be sure to unfold and read the next page.

Veuillez déplier et vous référer à la page suivante.  
Cerciórese de desplegar y de leer la página siguiente.  
Assicurarsi di aprire e leggere la pagina successiva.

### 3. CONTROLS / LES COMMANDES CONTROLES / CONTROLLI

Source unit / Appareil pilote / Unidad fuente / Unità di fonte



Note: Be sure to unfold this page and refer to the front diagrams as you read each chapter.

Remarque: Veillez déplier cette page et vous référer aux schémas quand vous lisez chaque chapitre.

Nota: Cuando lea los capítulos, despliegue esta página y consulte los diagramas.

Nota: Assicurarsi di aprire questa pagina e fare riferimento a questi diagrammi quando si legge ciascun capitolo.

### 4. NOMENCLATURE

**Note:**

- Be sure to read this chapter referring to the front diagrams of chapter "3. CONTROLS" on page 5 (unfold).

#### Names of the Buttons and their Functions

##### [RELEASE] button

- Deeply push in [RELEASE] button to release the front panel.

##### [ROTARY] knob

- Adjust the volume by turning the knob clockwise or counterclockwise.
- Use the knob to perform function adjustments.

##### [CD SLOT]

- CD insertion slot.

##### [▲] (Eject) button

- Eject a CD when it is loaded into the unit.

##### [Z+] (Z-Enhancer Plus) button

- Use the button to select one of the 3 types of sound characteristics already stored in memory, or a 4th custom user programmed setting.

##### [ISR] (Instant Station Recall) button

- Recall ISR radio station in memory.
- Press and hold for 2 seconds or longer: Store current station into ISR memory (radio mode only).

##### [DISP] (Display) button

- Switch the display indication (Main display, Sub display, Clock display).

##### [T] (Title) button

- Press and hold the button for 1 second or longer to enter the adjust mode.

##### [P/A] (Preset Scan/Auto Store) button

- Perform preset scan while in the radio mode. When the button is pressed and held, auto store is performed.

##### [DIRECT] (1–6) buttons

- Store a station into memory or recall it directly while in the radio mode.

##### [RDM] (Random) button

- CD plays random track order.

##### [RPT] (Repeat) button

- Repeat play while in the CD mode.

##### [SCN] (Scan) button

- Plays 10 seconds of each track while in the CD mode.

##### [▶II] (Play/Pause) button

- Play or pause a CD while in the CD mode.

##### [◀◀], [▶▶] buttons

- Select a station while in the radio mode or select a track when listening to a CD. The buttons are also used to adjust function settings.
- Press and hold the button for 1 second or longer to switch to fast-forward/fast-rewind.

##### [BND] (Band) button

- Switch the band.
- When the button is pressed and held, switch between seek or manual tunings.
- Play the first track of the CD.

##### [A-M] (Audio-Mode) button

- Use the button to switch to the audio mode (bass/treble, balance/fader Z-Enhancer Plus, Magna Bass Extended adjustment)

##### [FNC] (Function) button

- Press the button to turn on the power. Press and hold the button for 1 second or longer to turn the power off.
- Switches operation between Radio, CD, Aux, and CeNET modes.

# **Major button operations when external equipment is connected to this unit**

## ● When the Sirius Satellite Radio is connected

- \* For details, see the section “Sirius Satellite Radio operations”.

### [DISP] (Display) button

- When held depressed for 1 second or longer, switches title.

### [T] (Title) button

- Use to perform title scroll.

### [P/A] (Category scan) button

- Performs category scan. When the button is pressed and held, preset scan is performed.

### [DIRECT] (1–6) buttons

- Stores a station into memory or recall it directly.

### [▶||] (Category selection) button

- Enter the category selection mode.

### [◀], [▶] buttons

- Select a station.

### [BND] (Band) button

- Switch the band.
- When the button is pressed and held, switch between seek or manual tunings.

## ● When the CD changer is connected

- \* For details, see the section “CD Changer Operations”.

### [UP], [DN] (Up/Down) buttons

- Select the desired CD in the CD changer.

### [RDM] (Random) button

- Perform random play. Also perform disc random play when the button is pressed and held.

### [RPT] (Repeat) button

- Perform repeat play. When this button is pressed and held, single disc repeat play is performed.

### [SCN] (Scan) button

- Perform scan play for 10 seconds of each track. Disc scan play is performed when the button is pressed and held.

### [▶||] (Play/Pause) button

- Play or pause a CD.

### [◀], [▶] buttons

- Select a track when listening to a disc.
- Press and hold the button for 1 second or longer to switch to fast-forward/fast-rewind.

### [BND] (Band) button

- Move to the next disc in increasing order.

## ● When the TV is connected

- \* For details, see the section “TV Operations”.

### [P/A] (Preset Scan/Auto Store) button

- Perform preset scan. When the button is pressed and held, auto store is performed.

### [DIRECT] (1–6) buttons

- Store a station into memory or recall it directly.

### [▶||] (Play/Pause) button

- Switch the TV picture mode or VTR (external) picture mode.

### [◀], [▶] buttons

- Select a station.

### [BND] (Band) button

- Switch the band.
- When the button is pressed and held, switch between seek or manual tunings.

## Display Items

**ENT** : Enter indication

**MANU** : Manual indication

Operation status indication  
Titles, frequency, clock, etc. are displays.



**DISC CH 18** : Preset channel indication (1 to 6)  
Disc number indication (1 to 6)



SIRIUS indication

Z-Enhancer Plus indication

**/// M-B EX** : MAGNA BASS EXTEND indication

**ST** : Stereo indication

**DISC** : Disc indication

**SCN** : Scan indication

**RPT** : Repeat indication

**RDM** : Random indication

**CAT** : Category indication

**MUTE** : Mute indication

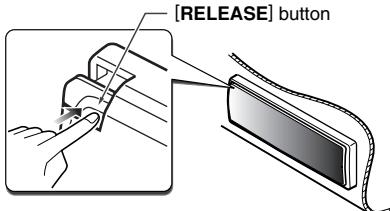
## LCD Screen

In extreme cold, the screen movement may slow down and the screen may darken, but this is normal. The screen will recover when it returns to normal temperature.

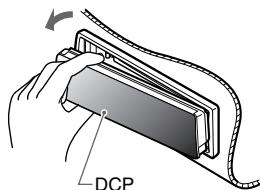
# 5. DETACHABLE CONTROL PANEL

## Removing the DCP

1. Press the [FNC] button for 1 second or longer to switch off the power.
2. Press in the [RELEASE] button.

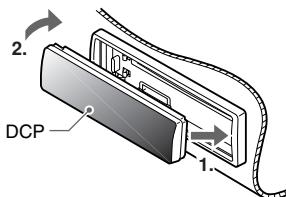


3. Remove the DCP.



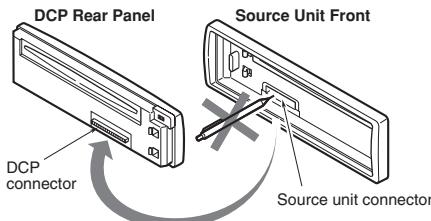
## Attaching the DCP

1. Insert the right side of the DCP into the source unit.
2. Insert the left side of the DCP into the source unit.



## CAUTION

- The DCP can be damaged by impact. After removing it, be careful not to drop or subject it to strong shocks.
- The connector connecting the source unit and the DCP is an extremely important part. Be careful not to damage it by pressing on it with fingernails, screwdrivers, etc.



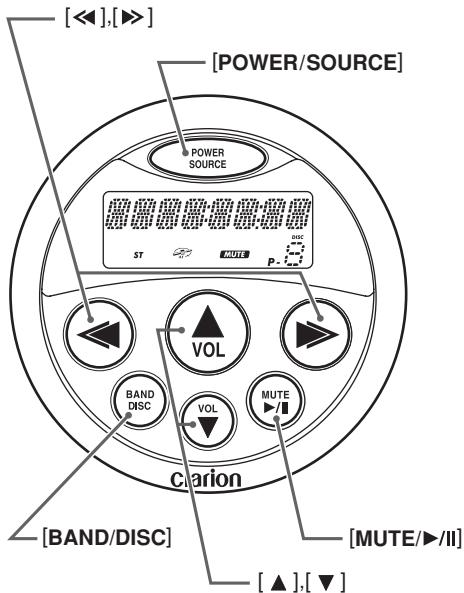
### Note:

- If the DCP is dirty, wipe off the dirt with a soft, dry cloth only.

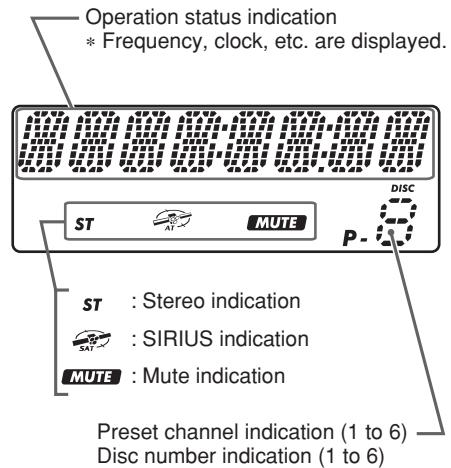
# 6. WIRED REMOTE CONTROL UNIT OPERATIONS

- Following operations are enabled by remote control with the Wired Remote Control Unit CMRC1 or CMRC2 (sold separately).

## WIRED REMOTE CONTROL UNIT



### Display Items



## ▲ CAUTION

Lower the volume level before powering the source unit off. The source unit stores the last volume setting. If the source unit is powered off with the volume up, when the source unit is powered back on, the sudden loud volume may harm your hearing and/or damage the source unit.

### [POWER/SOURCE] button

#### Turning on and off the power

Press the [SOURCE] button to turn the power on and press and hold it for 1 second or longer to turn the power off.

#### Changing the operation mode

Each time the [SOURCE] button is pressed, the mode switches in the following order:

**Radio mode → SIRIUS mode → CD mode  
→ CD changer mode → TV mode → AUX mode → Radio mode.....**

#### Notes:

- If the above equipment is not connected, corresponding mode cannot be selected.
- In CD mode, if no CD is loaded in the unit, the radio mode is selected.

### [▲], [▼] Buttons

#### Adjusting the volume

Press the [▲] button to increase the volume and press the [▼] button to decrease the volume.

### [BAND/DISC] Button

#### Changing the band (in Radio mode)

Each time the [BAND] button is pressed, the band switches in the following order:

**FM1 → FM2 → FM3 → AM → FM1.....**

#### Top function (in CD mode)

Press the [BAND] button, then the CD will start from the first song (track number 1).

#### Changing the disc (in CD changer mode)

Each time the [BAND] button is pressed, the disc switches in the following order:

**1 → 2 → 3 → 4 → 5 → 6 → 1.....**

### [MUTE/▶/II] Button

Press the [MUTE] button. The sound is muted immediately.

To cancel, press the [MUTE] button again.

### [◀], [▶] Buttons

#### Selecting tracks (in CD changer mode or CD mode)

Press the [▶] button to start playback from the beginning of the following track. Press the [◀] button to start playback from the beginning of the current track. If pressed again, the track moves to the previous one.

#### Fast-forward and fast-rewind (in CD changer mode or CD mode)

Press and hold the [▶] button to fast-forward the disc. Press and hold the [◀] button to fast-rewind the disc.

\* Pressing and holding the [◀] or [▶] buttons for 1 second or longer will move forward or backward 3 times faster than normal play, and pressing and holding it for 3 seconds or longer will do the operation 30 times faster.

#### Changing preset stations (in Radio mode)

Each time the [◀] or [▶] buttons are pressed, the preset station switches in the following order:

**1 → 2 → 3 → 4 → 5 → 6 → 1.....**

or

**6 → 5 → 4 → 3 → 2 → 1 → 6.....**

# 7. OPERATIONS

## Basic Operations

### ▲CAUTION

Lower the volume level before powering the source unit off. The source unit stores the last volume setting. If the source unit is powered off with the volume up, when the source unit is powered back on, the sudden loud volume may harm your hearing and/or damage the source unit.

### Turning on/off the power

#### Note:

- Be careful about using this unit for a long time without running the engine. If you drain the boat's battery too far, you may not be able to start the engine, and this can reduce the service life of the battery.

1. Press the [FNC] button.
2. The illumination and display on the unit light up. The unit automatically remembers its last operation mode and will automatically switch to display that mode.
3. Press and hold the [FNC] button for 1 second or longer to turn off the power for the unit.

#### Note:

##### • System check

*During the initial power up of this unit, it will go through a system check procedure. This procedure verifies any devices connected through CeNET. Any additional CeNET devices plugged into the unit after the initial power up will initiate the system check procedure. The system check starts automatically within the unit.*

### Selecting a mode

1. Press the [FNC] button to change the operation mode.
2. Each time you press the [FNC] button, the operation mode changes in the following order:  
**Radio mode → SIRIUS mode → CD mode → CD changer mode → TV mode → AUX mode → Radio mode...**  
\* External equipment not connected with CeNET is not displayed.

**Note:** Be sure to read this chapter referring to the front diagrams of chapter "3. CONTROLS" on page 5 (unfold).

### Adjusting the volume

Turning the [ROTARY] knob clockwise increases the volume; turning it counterclockwise decreases the volume.

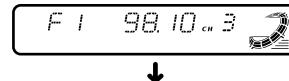
\* The volume level is from 0 (minimum) to 33 (maximum).

### Switching the display

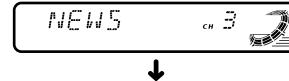
Press the [DISP] button to select the desired display.

Each time you press the [DISP] button, the display switches in the following order:

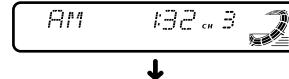
Main display



Sub display (SIRIUS mode only)



Clock display



Main display

\* Once selected, the preferred display becomes the display default. When a function adjustment such as volume is made, the screen will momentarily switch to that function's display, then revert back to the preferred display several seconds after the adjustment.

### Setting the Z-Enhancer Plus

This unit are provided with 3 types of sound tone effects stored in memory. Select the one you prefer.

\* The factory default setting is "Z+ OFF".

Each time you press the [Z+] button, the tone effect changes in the following order:

**"Z+ OFF" → "B-BOOST" → "IMPACT" → "EXCITE" → "CUSTOM" → "Z+ OFF" ...**

- B-BOOST : bass emphasized
- IMPACT : bass and treble emphasized
- EXCITE : bass and treble emphasized mid de-emphasized
- CUSTOM : user custom
- Z+ OFF : no sound effect

### Adjusting the Z-Enhancer Plus

1. Press the [Z+] button and select the Z-Enhancer Plus mode to adjust.
2. Press the [A-M] button and turning the [ROTARY] knob clockwise adjusts in the + direction; turning it counterclockwise adjusts in the - direction.
  - When “B-BST 0” is selected, you can adjust the bass in the range of -3 to 3.
  - When “IMPACT 0” is selected, you can adjust the bass and treble in the range of -3 to 3.
  - When “EXCITE 0” is selected, you can adjust the bass and treble in the range of -3 to 3.
  - When “CUSTOM” mode is selected, bass gain, frequency and Q-curve, and treble gain and frequency can be adjusted.
- \* Press and hold the [Z+] button for 1 second or longer, then the setting parameter of bass/treble will be initialized with a display “Z+FLAT”.

### Adjusting the tone

Press the [A-M] button and select the item to adjust. Each time you press the [A-M] button, the item changes as following order:

#### ● When “B-BOOST” is set

“S-VOL 0” → “B-BOOST” → “BAL 0” → “FAD 0” → Last function mode.

#### ● When “IMPACT” is set

“S-VOL 0” → “IMPACT” → “BAL 0” → “FAD 0” → Last function mode.

#### ● When “EXCITE” is set

“S-VOL 0” → “EXCITE” → “BAL 0” → “FAD 0” → Last function mode.

#### ● When “CUSTOM” is set

“S-VOL 0” → “BASS” → “TREBLE” → “BAL 0” → “FAD 0” → Last function mode.

#### ● When “Z+ OFF” is set

“S-VOL 0” → “BAL 0” → “FAD 0” → Last function mode.

#### Note:

- If the rear line level output is set to the full range “REAR” setting, “S-VOL” will not be shown as a selection.

### Adjusting the bass

#### (Gain, Frequency, Q-curve)

This adjustment can be performed when the Z-Enhancer Plus is set to “CUSTOM”.

1. Press the [A-M] button and select “BASS”.
2. Turning the [ROTARY] knob clockwise emphasizes the bass; turning it counterclockwise attenuates the bass.
  - \* The factory default setting is “B<G 0>”.  
(Adjustment range: -6 to +6)
3. Press the [◀] or [▶] button to select “B<F 60>”.  
Turn the [ROTARY] knob to select the frequency.
  - \* The factory default setting is “B<F 60>”.  
(Adjustment 60/100/200 Hz)
4. Press the [◀] or [▶] button to select “B<Q 1>”.  
Turn the [ROTARY] knob to select the Q-curve.
  - \* The factory default setting is “B<Q 1>”.  
(Adjustment 1/1.25/1.5/2)
5. When the adjustment is complete, press the [A-M] button several times until the function mode is reached.

### Adjusting the treble

#### (Gain, Frequency)

This adjustment can be performed when the Z-Enhancer Plus is set to “CUSTOM”.

1. Press the [A-M] button and select “TREBLE”.
2. Turning the [ROTARY] knob clockwise emphasizes the treble; turning it counterclockwise attenuates the treble.
  - \* The factory default setting is “T<G 0>”.  
(Adjustment range: -6 to +6)
3. Press the [◀] or [▶] button to select “T<F 10>”.  
Turn the [ROTARY] knob to select the frequency.
  - \* The factory default setting is “T<F 10>”.  
(Adjustment 10 kHz/15 kHz)
4. When the adjustment is complete, press the [A-M] button several times until the function mode is reached.

## Basic Operations

### Adjusting the balance

1. Press the [A-M] button and select “BAL 0”.
2. Turning the [ROTARY] knob clockwise emphasizes the sound from the right speaker; turning it counterclockwise emphasizes the sound from the left speaker.  
\* The factory default setting is “BAL 0”.  
(Adjustment range: L13 to R13)
3. When the adjustment is complete, press the [A-M] button several times until the function mode is reached.

### Adjusting the fader

1. Press the [A-M] button and select “FAD 0”.
2. Turning the [ROTARY] knob clockwise emphasizes the sound from the front speakers; turning it counterclockwise emphasizes the sound from the rear speakers.  
\* The factory default setting is “FAD 0”.  
(Adjustment range: F12 to R12)
3. When the adjustment is complete, press the [A-M] button several times until the function mode is reached.

### Setting MAGNA BASS EXTEND

The MAGNA BASS EXTEND does not adjust the low sound area like the normal sound adjustment function, but emphasizes the deep bass sound area to provide you with a dynamic sound.

\* The factory default setting is “OFF”.

1. Press and hold the [A-M] button for 1 second or longer to turn on the MAGNA BASS EXTEND effect. “M-B EX” lights in the display.
2. Press and hold the [A-M] button for 1 second or longer to turn off the MAGNA BASS EXTEND effect. “M-B EX” goes off from the display.

## Radio Operations

### FM reception

For enhanced FM performance the **MAGITUNE®** tuner includes signal actuated stereo control, Enhanced Multi AGC, Impulse noise reduction circuits and Multipath noise reduction circuits.

### Changing the reception area

This unit is initially set to USA frequency intervals of 10kHz for AM and 200kHz for FM. When using it outside the USA, the frequency reception range can be switched to the intervals below.

	U.S. standard (Initial setting)	Other countries	Europe standard
AM	Frequency spacing	10 kHz	9 kHz
	Frequency range	530 to 1,710 kHz	531 to 1,629 kHz
FM	Frequency spacing	200 kHz	50 kHz
	Frequency range	87.9 to 107.9 MHz	87.0 to 108 MHz

### Setting the reception area

\* Any station preset memories are lost when the reception area is changed.

1. Press the [BND] button and select the desired radio band (FM or AM).
- **U.S. standard (initial setting)**
2. While pressing the [DISP] button, press and hold the number “1” of the [DIRECT] buttons for 2 seconds or longer.
- **Other countries (new setting)**
2. While pressing the [DISP] button, press and hold the number “2” of the [DIRECT] buttons for 2 seconds or longer.
- **Europe standard (new setting)**
2. While pressing the [DISP] button, press and hold the number “3” of the [DIRECT] buttons for 2 seconds or longer.

### Listening to the radio

1. Press the [FNC] button and select the radio mode. The frequency appears in the display.
2. Press the [BND] button and select the radio band. Each time the button is pressed, the radio reception band changes in the following order:  
**FM1 → FM2 → FM3 → AM → FM1...**
3. Press the [**<<**] or [**>>**] button to tune in the desired station.

### Tuning

There are 3 types of tuning mode available, seek tuning, manual tuning and preset tuning.

## Seek tuning

1. Press the [BND] button and select the desired band (FM or AM).  
\* If "MANU" is lit in the display, press and hold the [BND] button for 1 second or longer. "MANU" in the display goes off, and seek tuning is now available.
2. Press the [ $\ll$ ] or [ $\gg$ ] button to automatically seek a station.  
When the [ $\gg$ ] button is pressed, the station is sought in the direction of higher frequencies; if the [ $\ll$ ] button is pressed, the station is sought in the direction of lower frequencies.

## Manual tuning

There are 2 manual tuning methods available: Quick tuning and step tuning.

When you are in the step tuning mode, the frequency changes one step at a time. In the quick tuning mode, you can quickly tune the desired frequency.

1. Press the [BND] button and select the desired band (FM or AM).  
\* If "MANU" is not lit in the display, press and hold the [BND] button for 1 second or longer. "MANU" is lit in the display and manual tuning is now available.

2. Tune in a station.

### ● Quick tuning:

Press and hold the [ $\ll$ ] or [ $\gg$ ] button for 1 second or longer to tune in a station.

### ● Step tuning:

Press the [ $\ll$ ] or [ $\gg$ ] button to manually tune in a station.

## Recalling a preset station

A total of 24 preset positions (6-FM1, 6-FM2, 6-FM3, 6-AM) exist to store individual radio stations in memory. Pressing the corresponding [DIRECT] button recalls the stored radio frequency automatically.

1. Press the [BND] button and select the desired band (FM or AM).
2. Press the corresponding [DIRECT] button to recall the stored station.  
\* Press and hold one of the [DIRECT] buttons for 2 seconds or longer to store the current station into preset memory.

## Manual memory

1. Select the desired station with seek tuning, manual tuning or preset tuning.

2. Press and hold one of the [DIRECT] buttons for 2 seconds or longer to store the current station into preset memory.

## Auto store

Auto store is a function for storing up to 6 stations that are automatically tuned in sequentially. If 6 receivable stations cannot be received, a previously stored station remains unoverwritten at the memory position.

1. Press the [BND] button and select the desired band (FM or AM).
2. Press and hold the [P/A] button for 2 seconds or longer. The stations with good reception are stored automatically to the preset channels.

## Preset scan

Preset scan receives the stations stored in preset memory in order. This function is useful when searching for a desired station in memory.

1. Press the [P/A] button.
2. When a desired station is tuned in, press the [P/A] button again to continue receiving that station.

### Note:

- Be careful not to press and hold the [P/A] button for 2 seconds or longer, otherwise the auto store function is engaged and the unit starts storing stations.

## Instant station recall (ISR)

Instant station recall is a special radio preset that instantly accesses a favorite radio station at a touch of a button. The ISR function even operates with the unit in other modes.

### ● ISR memory

1. Select the station that you wish to store in ISR memory.
2. Press and hold the [ISR] button for 2 seconds or longer.

### ● Recalling a station with ISR

In any mode, press the [ISR] button to turn on the radio function and tune the selected radio station. "ISR" appears in the display. Press the [ISR] button again to return to the previous mode.

### Note:

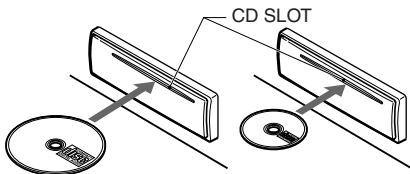
- Radio operations are disabled during ISR mode. Press one of the [DIRECT] buttons to return to the previous mode.

# CD Operations

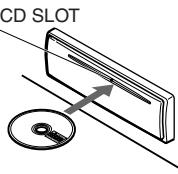
## Loading a CD

Insert a CD into the center of the [CD SLOT] with the label side facing up. "CD" or "LOADING" appears on the display, the CD enters into the slot, and play starts.

For CD (12 cm)



For single CD (8 cm)



### Notes:

- Never insert foreign objects into the CD SLOT.
- If the CD is not inserted easily, there may be another CD in the mechanism or the unit may require service.
- Discs not bearing the  mark and CD-ROMs cannot be played by this unit.
- Some CDs recorded in CD-R/CD-RW mode may not be usable.

## Loading 8 cm compact discs

- \* No adapter is required to play an 8 cm CD.
- \* Insert the 8 cm CD into the center of the insertion slot.

## Ejecting a CD

1. Press the [ $\Delta$ ] button to eject the CD, "EJECT" appears on the display, take it out from the ejected position.

### Notes:

- Forcing a CD into the CD mechanism can damage the CD or source unit.  
*The CD will automatically load after being placed approximately 1/3rd of the way into the CD mechanism.*
- If a CD (12 cm) is left in the ejected position for 15 seconds, the CD is automatically reloaded (Auto reload).
- 8 cm CDs are not auto reloaded. Be sure to remove it when ejected.

## Listening to a CD already inserted

Press the [FNC] button to select the CD mode. Play starts automatically. If no CD is loaded in the unit, "NO DISC" appears in the display.

## Pausing play

1. Press the [ $\blacktriangleright\text{II}$ ] button to pause play. "PAUSE" appears in the display.

2. To resume CD play, press the [ $\blacktriangleright\text{II}$ ] button again.

## Selecting a track

### ● Track-up

1. Press the [ $\gg$ ] button to move ahead to the beginning of the next track.
2. Each time you press the [ $\gg$ ] button, the track advances ahead to the beginning of the next track.

### ● Track-down

1. Press the [ $\ll$ ] button to move back to the beginning of the current track.
2. Press the [ $\ll$ ] button twice to move to the previous track.

## Fast-forward/fast-rewind

### ● Fast-forward

Press and hold the [ $\gg$ ] button for 1 second or longer.

### ● Fast-rewind

Press and hold the [ $\ll$ ] button for 1 second or longer.

## Top function

The top function resets the CD player to the first track of the disc. Press the [BND] button to play the first track (track No. 1) on the disc.

## Scan play

Scan play locates and plays the first 10 seconds of each track on a disc automatically. This function continues on the disc until it is cancelled.

\* The scan play is useful when you want to select a desired track.

1. Press the [SCN] button.
2. To cancel the scan play, press the [SCN] button again.

## Repeat play

Repeat play continuously plays the current track. This function continues automatically until it is cancelled.

1. Press the [RPT] button.
2. To cancel the repeat play, press the [RPT] button again.

**Random play**

Random play selects and plays individual tracks on a disc in no particular order. This function continues automatically until it is cancelled.

1. Press the [RDM] button.
2. To cancel the random play, press the [RDM] button again.

**Operations Common to Each Mode****Setting the clock**

1. Press and hold the [T] button for 1 second or longer to switch to the adjustment selection display.
2. Press the [ $\ll$ ] or [ $\gg$ ] button to select "CLOCK".
3. Press the [ $\blacktriangleright$  II] button.
4. Press the [ $\ll$ ] or [ $\gg$ ] button to select the hour or the minute.
5. Turn the [ROTARY] knob to set the correct time.  
\* The clock is displayed in 12-hour format.
6. Press the [ $\blacktriangleright$  II] button to store the time into memory.
7. Press the [T] button to return to the previous mode.

**Note:**

- You cannot set the clock when it is displayed with only the ignition on. If you drain or remove the boat's battery or take out this unit, the clock is reset. While setting the clock, if another button or operation is selected, the clock set mode is canceled.

**Turning the screen saver function on or off**

This unit is provided with the screen saver function which allows you to show various kinds of patterns and characters in the Operation Status indication area of the display in a random order. You can turn on and off this function. If the button operation is performed with the screen saver function on, the operation display corresponding to the button operation is shown for about 30 seconds and the display returns to the screen saver display.

\* The factory default setting is "OFF".

1. Press and hold the [T] button for 1 second or longer to switch to the adjustment selection display.

2. Press the [ $\ll$ ] or [ $\gg$ ] button to select "SCRN SVR".
3. Press the [ $\blacktriangleright$  II] button.
4. Turn the [ROTARY] knob to select the setting. Each time you turn the [ROTARY] knob, the setting changes in the following order:  
**OFF → SS → MESSAGE**
5. Press the [ $\blacktriangleright$  II] button to store the setting.
6. Press the [T] button to return to the previous mode.

**Entering MESSAGE INFORMATION**

Message up to 30 characters long can be stored in memory and displayed for any mode.

\* The factory default setting is "WELCOME TO CLARION".

1. Press and hold the [T] button for 1 second or longer to switch to the adjustment selection display.
2. Press the [ $\ll$ ] or [ $\gg$ ] button to select "INPUT".
3. Press the [ $\blacktriangleright$  II] button.
4. Press the [BND] button to clear the old message.
5. Press the [ $\ll$ ] or [ $\gg$ ] button to move the cursor.
6. Press the [DISP] button to select a character. Each time you press the [DISP] button, the character changes in the following orders:  
**Numbers → Symbols → Capital letters → Numbers...**
7. Turn the [ROTARY] knob to select the desired character.
8. Repeat step 5 to 7 to enter up to 30 message characters.
9. Press and hold the [ $\blacktriangleright$  II] button for 2 seconds or longer to store the message in memory and cancel the input message.
10. Press the [T] button to return to the previous mode.

## Operations Common to Each Mode

### Setting LOW PASS FILTER

This function allows you to set the low-pass filter for sub-woofer output.

\* The factory default setting is “REAR”.

1. Press and hold the [T] button for 1 second or longer to switch to the adjustment selection display.
2. Press the [ $\ll$ ] or [ $\gg$ ] button to select “SW LPF”.
3. Turn the [ROTARY] knob to select the setting. Each time you turn the [ROTARY] knob, the setting changes in the following order:  
**REAR → LPF 50 → LPF 80 → LPF 120**
4. Press the [T] button to return to the previous mode.

### Adjusting the Subwoofer

When you default select one of mode (LPF50, LPF80, LPF120).

1. Press the [A-M] button and select “S-VOL 0”.
2. Turn the [ROTARY] knob to adjust the subwoofer volume.  
The factory default setting is “S-VOL 0”.  
(Adjustment range: -6 to +6)
3. When the adjustment is complete, press the [A-M] button several times until the function mode is reached.

### Adjusting the display contrast

You can adjust the display contrast to match the angle of installation of the unit.

\* The factory default setting is “8”. (Adjustment level: 1 to 8)

1. Press and hold the [T] button for 1 second or longer to switch to the adjustment selection display.
2. Press the [ $\ll$ ] or [ $\gg$ ] button to select “CONTRAST”.
3. Turn the [ROTARY] knob to adjust the contrast.
4. Press the [T] button to return to the previous mode.

### Selecting AUX IN sensitivity

Make the following settings to select the sensitivity when sounds from external devices connected to this unit are difficult to hear even after adjusting the volume.

\* The factory default setting is “MID”.

1. Press and hold the [T] button for 1 second or longer to switch to the adjustment selection display.
2. Press the [ $\ll$ ] or [ $\gg$ ] button to select “AUX SENS”.
3. Turn the [ROTARY] knob to select from “HIGH”, “MID” or “LOW”.
4. Press the [T] button to return to the previous mode.

### Performing a system check

This function verifies the devices hooked up through CeNET.

1. Press and hold the [T] button for 1 second or longer to switch to the adjustment selection display.
2. Press the [ $\ll$ ] or [ $\gg$ ] button to select “S-CHECK”.
3. Press and hold the [ $\triangleright II$ ] button for 1 second or longer to start the system check.  
CeNET connection configuration is automatically checked.

When the system check is complete, the display returns to the previous mode.

### AUX function

This system has an external input jack so you can listen to sounds and music from external devices connected to this unit.

# 8. ACCESSORIES

## Sirius Satellite Radio Operations

### What is Sirius Satellite Radio?

Sirius is radio the way it was meant to be: Up to 100 new channels of digital quality programming delivered to listeners coast to coast via satellite. That means 50 channels of completely commercial-free music. Plus up to 50 more channels of news, sports, and entertainment from names like CNBC, Discovery, SCI-FI Channel, A&E, House of Blues, E!, NPR, Speedvision and ESPN.

Sirius is live, dynamic entertainment, completely focused on listeners. Every minute of every day of every week will be different. All 50 commercial-free music channels are created in-house and hosted by DJs who know and love the music. Do you like Reggae? How about Classic Rock or New Rock? Sirius has an array of choices spanning a vast range of musical tastes including the hits of the 50's, 60's, 70's, & 80's as well as Jazz, Country, Blues, Pop, Rap, R&B, Bluegrass, Alternative, Classical, Heavy Metal, Dance and many others...

From its state-of-the-art, digital broadcasting facility in Rockefeller Center, New York City, Sirius will deliver the broadest, deepest mix of radio entertainment from coast to coast.

Sirius will bring you music and entertainment programming that is simply not available on traditional radio in any market across the country. It's radio like you've never heard before.

So Get Sirius and Listen Up! For more information, visit [siriusradio.com](http://siriusradio.com).

### To receive Sirius Satellite Radio on this receiver

This receiver contains a SIRIUS ID for user identification. All you have to do to obtain a subscriber contract and enable reception of Sirius Satellite Radio is to call the Sirius Service Center (1-888-539-SIRIUS (7474), online at [siriusradio.com](http://siriusradio.com)) and inform us of your SIRIUS ID and a few other details.

### Verifying your Sirius ID

1. Press and hold the [T] button for 1 second or longer to switch to the adjustment selection display.
2. Press the [ $\ll$ ] or [ $\gg$ ] button to select "SID DISP".

3. Press the [ $\blacktriangleright$  II] button to display the SIRIUS ID.

The source unit displays the high-order 6 digits of the SIRIUS ID in the Operation status indication.

4. Turn the [ROTARY] knob clockwise to change the low-order 6 digits of the SIRIUS ID.

To display the high-order 6 digits of the SIRIUS ID again, turn the [ROTARY] knob counterclockwise.

### Selecting Sirius Radio modes

Press the [FNC] button to select the Sirius mode.

The Sirius indication lights entering the mode that was engaged when the unit was turned off last time.

### Selecting a band

Press the [BND] button to select a band.

Each press of the button changes the display as shown below.

**SR1 → SR2 → SR3 → SR1 ...**

- \* The currently received band is displayed in the function mode indication.
- \* Models without a function mode indication display the band name and channel number in the Operation status indication.

### ● Information displayed during reception

The following information is displayed in the Operation status indication when Sirius Radio cannot be received normally.

- **UPDATING** : when the receiver is turned on the first time or after a reset
- **LINKING** : when a channel is being tuned in (no signal is yet received), or an antenna issue exists.
- **INVLD CH** : a channel without a broadcast has been selected, or the receiver may not be activated.
- **"CALL 888" → "539-SIRI"** : a channel not covered by your contract  
Call Sirius Service Center (1-888-539-SIRIUS (7474)).  
Online at [siriusradio.com](http://siriusradio.com)

## Switching the display

1. Press the [DISP] button to select the sub display.
2. In the sub display, press and hold the [DISP] button for 1 second or longer to cycle between the following display modes:

**Channel name → title → artist name → category name → text → channel name**  
→ ...

### Notes:

- The Operation status indication of the source unit displays the abbreviated channel name for 2 seconds when a station is selected before returning to the previous display mode.
- Scrolling starts when the channel name or other text has been displayed for 2 seconds. When scrolling finishes, the first text display appears. To start scrolling again, press the [T] button.

## Channel selection

Channels are selected with the following buttons.

- The [ $\lll$ ] or [ $\ggg$ ] button
- The [DIRECT] buttons
- The [ $\blacktriangleright$ / $\text{II}$ ] button
- The [P/A] button

\* For details, see the following operation descriptions.

### Note:

- The audio output is muted and other button operations are not accepted during channel selection.

## Tuning

There are 3 types of tuning mode available, seek tuning, manual tuning and preset tuning.

## Seek tuning

Only channels that can be received are selected while channels without broadcasts and channels not covered by the contract are automatically skipped.

1. Press the [ $\lll$ ] or [ $\ggg$ ] button.  
The receiver seeks the next available channel below or above the current channel.
2. Press and hold the [ $\lll$ ] or [ $\ggg$ ] button.  
The receiver moves to seek channels below or above the current channel. If the channel found when either button is released is available that channel is received.  
Otherwise, seeking continues until an available channel is found.

## Manual tuning

Any channel including channels without broadcasts and channels not covered by the contract can be selected during manual tuning.

1. Press and hold the [BND] button for 1 second or longer.
  - \* This changes the seek mode to manual mode and the "MANU" indicator on the display lights. When this operation is performed in manual mode, the seek mode is engaged and the "MANU" indicator on the display goes off.

### Note:

- The receiver automatically reverts to the seek mode when the [ $\lll$ ] or [ $\ggg$ ] button is not used for 7 seconds in the manual mode.
- 2. Press the [ $\lll$ ] or [ $\ggg$ ] button. The receiver moves to channels above or below the current channel one by one.
- 3. Press and hold the [ $\lll$ ] or [ $\ggg$ ] for 1 second or longer.  
The receiver moves to seek channels below or above the current channel and the channel found when either button is released is received.

## Recalling a preset channel

A total of 18 SIRIUS channels can be stored (6-SR1, 6-SR2 and 6-SR3). This allows you to select your favorite SIRIUS channels and store them in memory for later recall.

1. Press the [BND] button and select the desired SIRIUS band (SR1, SR2 or SR3).
2. To recall a stored SIRIUS channel, press the desired [DIRECT] button to select that channel.
  - \* Press and hold one of the [DIRECT] buttons for 2 seconds or longer to store the current channel into preset memory.

## Manual memory

1. Select the desired channel with seek tuning, manual tuning or preset tuning.
2. Press and hold one of the [DIRECT] buttons for 2 seconds or longer to store the current channel into preset memory.

### Notes:

- When the name of a channel stored in memory is changed by a broadcasting channel, the display may show a channel name that differs from the stored name.
- A channel stored in memory may be discontinued at the option of the broadcasting channel.

## Category selection function

SIRIUS Radio allows you to select broadcast channel category (contents).

## Receiving channels selected by category

This starts seek tuning and broadcast channels that meet the specified category are selected. The “CAT” indicator is displayed during the category selection mode.

1. Press the [▶II] button to enter the category selection mode.
2. Turn the [ROTARY] knob clockwise or counterclockwise to select a category. Or, press a [DIRECT] button if the category is preset.
3. Press the [◀] or [▶] button to tune in a channel.
4. Press the [▶II] button again to cancel.

### Notes:

- When the category selection mode is entered, the category of the last received channel is displayed first.
- The category selection mode is canceled when no channel with the selected category can be found.
- Press the [◀] or [▶] button within 7 seconds after a channel has been set to continue seeking channels up or down. The category selection mode is canceled and normal reception is resumed if no operation is performed for 7 seconds.

## Presetting a category

A category can be preset by registering specific categories in [DIRECT] buttons 1 to 6. Then the desired category can be recalled by pressing the corresponding [DIRECT] button.

1. Press the [▶II] button to enter the category mode.
2. Turn the [ROTARY] knob clockwise or counterclockwise to select a category.
3. Press and hold one of the [DIRECT] buttons for 2 seconds or longer to store the current category into preset memory.

### Notes:

- When the name of a channel stored in memory is changed by a broadcasting channel, the display may show a channel name that differs from the stored name.
- A channel stored in memory may be discontinued at the option of the broadcasting channel.

## Scan function

There are two scan modes: a category scan mode and a preset scan mode.

During scanning, channels are displayed in abbreviated form and the display mode cannot be switched.

### ● Category scanning

In a category scan, broadcast channels in the same category as the current channel are selected about every 10 seconds.

1. Press the [P/A] button to start a category scan.
2. Press the [P/A] button, a [DIRECT] button, the [◀] or [▶] button to cancel a category scan.

### Note:

- Category scanning is not available when no category is defined for the current channel.

### ● Preset scan

A preset scan scans the channels (up to 18 channels) stored in the preset memory about every 10 seconds.

1. Press and hold the [P/A] button for 1 second or longer to start a preset scan.
2. Press the [P/A] button, a [DIRECT] button, the [◀] or [▶] button to cancel a preset scan.

# CD Changer Operations

## CD changer functions

When an optional CD changer is connected through the CeNET cable, this unit controls all CD changer functions. This unit can control a total of 2 changers.

Press the [FNC] button and select the CD changer mode to start play. If 2 CD changers are connected, press the [FNC] button to select the CD changer for play.

- \* If "NO MAG" appears in the display, insert the magazine into the CD changer. "DISC CHK" appears in the display while the player loads (checks) the magazine.
- \* If "NO DISC" appears in the display, eject the magazine and insert discs into each slot. Then, reinsert the magazine back into the CD changer.

### Note:

- Some CDs recorded in CD-R/CD-RW mode may not be usable.

## CAUTION

Depending on the recording format, CD-ROM discs may not play properly.

## Pausing play

1. Press the [ $\blacktriangleright$  II] button to pause play.  
"PAUSE" appears in the display.
2. To resume CD play, press the [ $\blacktriangleright$  II] button again.

## Selecting a CD

1. Press the [UP] or [DN] button to select the desired disc.
- \* If a CD is not loaded in a slot of magazine, pressing the [UP] or [DN] button can not work.

## Selecting a track

### ● Track-up

1. Press the [ $\blacktriangleright$ ] button to move ahead to the beginning of the next track.
2. Each time you press the [ $\blacktriangleright$ ] button, the track advances ahead to the beginning of the next track.

### ● Track-down

1. Press the [ $\blacktriangleleft$ ] button to move back to the beginning of the current track.
2. Press the [ $\blacktriangleleft$ ] button twice to move to the beginning of the previous track.

## Fast-forward/fast-rewind

### ● Fast-forward

Press and hold the [ $\blacktriangleright$ ] button for 1 second or longer.

### ● Fast-rewind

Press and hold the [ $\blacktriangleleft$ ] button for 1 second or longer.

## Scan play

Scan play locates and plays the first 10 seconds of each track on a disc automatically. This function continues on the disc until it is cancelled.

\* The scan play is useful when you want to select a desired track.

1. Press the [SCN] button.
2. To cancel the scan play, press the [SCN] button again.

## Disc scan play

Disc scan play locates and plays the first 10 seconds of the first track on each disc in the currently selected CD changer. This function continues automatically until it is cancelled.

- \* Disc scan play is useful when you want to select a desired CD.
1. Press and hold the [SCN] button for 1 second or longer.
  2. To cancel disc scan play, press the [SCN] button again.

## Repeat play

Repeat play continuously plays the current track. This function continues automatically until it is cancelled.

1. Press the [RPT] button.
2. To cancel repeat play, press the [RPT] button again.

## Disc repeat play

After all the tracks on the current disc have been played, disc repeat play automatically replays the current disc over from the first track. This function continues automatically until it is cancelled.

1. Press and hold the [RPT] button for 1 second or longer.
2. To cancel disc repeat play, press the [RPT] button again.

## CD Changer Operations

### **Random play**

Random play selects and plays individual tracks on the disc in no particular order. This function continues automatically until it is cancelled.

1. Press the [RDM] button.
2. To cancel random play, press the [RDM] button again.

### **Disc random play**

The disc random play selects and plays individual tracks or discs automatically in no particular order. This function continues automatically until it is cancelled.

1. Press and hold the [RDM] button for 1 second or longer.
2. To cancel disc random play, press the [RDM] button again.

## TV Operations

### **TV tuner functions**

When an optional TV tuner is connected through the CeNET cable, this unit controls all TV tuner functions. To watch TV requires a TV tuner and monitor.

### **Watching a TV**

1. Press the [FNC] button and select the TV mode.
2. Press the [BND] button to select the desired TV band (TV1 or TV2). Each time the button is pressed, the input selection toggles between TV1 and TV2.
3. Press the [ $\ll$ ] or [ $\gg$ ] button to tune in the desired TV station.

### **Watching a video**

The TV tuner has a VTR input terminal to which 1 external device can be connected. Connect a 12 V video cassette player (VCP) or video cassette recorder (VCR) to the TV tuner input terminal.

1. Press the [ $\blacktriangleright$  II] button to select VTR.
2. To return to the TV broadcast, press the [ $\blacktriangleright$  II] button.

### **TV tuning**

There are 3 types of tuning mode available, seek tuning, manual tuning and preset tuning.

### **Seek tuning**

1. Press the [BND] button and select the desired TV band (TV1 or TV2).
  - \* If "MANU" is lit in the display, press and hold the [BND] button for 1 second or longer. "MANU" in the display goes off, and seek tuning is now available.
2. Press the [ $\ll$ ] or [ $\gg$ ] button to automatically seek a station. Press the [ $\gg$ ] button to automatically tune up the frequency band to the next available TV station; press the [ $\ll$ ] button to automatically tune down.

### **Manual tuning**

There are 2 manual tuning methods available: Quick tuning and step tuning.

When you are in the step tuning mode, the frequency changes one step at a time. In the quick tuning mode, you can quickly tune the desired frequency.

## TV Operations

- Press the [BND] button and select the desired band (TV1 or TV2).
  - If "MANU" is not lit in the display, press and hold the [BND] button for 1 second or longer. "MANU" lights in the display and manual tuning is now available.

- Tune in a station.

**Quick tuning:**

Press and hold the [ $\ll$ ] or [ $\gg$ ] button for 1 second or longer to tune in a station.

**Step tuning:**

Press the [ $\ll$ ] or [ $\gg$ ] button to manually tune in a station.

### Recalling a preset station

A total of 12 TV stations can be stored (6-TV1 and 6-TV2). This allows you to select your favorite TV stations and store them in memory for later recall.

- Press the [BND] button and select the desired TV band (TV1 or TV2).
  - To recall a stored TV station, press the desired [DIRECT] button to select that station.
- \* Press and hold one of the [DIRECT] buttons for 2 seconds or longer to store the current station into preset memory.

### Manual memory

- Select the desired station with seek tuning, manual tuning or preset tuning.
- Press and hold one of the [DIRECT] buttons for 2 seconds or longer to store the current station into preset memory.

### Auto store

Auto store selects 6 TV stations automatically and stores each one into preset memory.

If there are not 6 stations with good reception, stations previously stored in memory remain and only the strong stations are stored into memory.

- Press the [BND] button and select the desired TV band (TV1 or TV2).
- Press and hold the [P/A] button for 2 seconds or longer. The stations with good reception are stored automatically to the preset channels.

### Preset scan

Preset scan allows the user to view each preset position before it automatically advances to the next preset. This function is useful for searching for a desired TV station in memory.

- Press the [P/A] button.
- When the desired station is found, press the [P/A] button again to remain tuned to that station.

**Note:**

- Do not press and hold the [P/A] button for 2 seconds or longer. Doing so will trigger the auto store function and start storing stations into memory.*

### Setting the TV area

When you select the TV area (TV reception area), the TV tuner area setting changes.

- Press and hold the [T] button for 1 second or longer to switch to the adjustment selection display.
- Press the [ $\ll$ ] or [ $\gg$ ] button to select "TV AREA".
- Press the [ $\triangleright$  II] button.
- Turn the [ROTARY] knob to select the reception area.
- Press the [ $\triangleright$  II] button.
- Press the [T] button to return to the previous mode.

The above operations are required when a TV tuner other than TTX7501z is connected.

### Setting the TV diver

You can change the reception setting for the TV antenna connected to the TV tuner.

- Press and hold the [T] button for 1 second or longer to switch to the adjustment selection display.
- Press the [ $\ll$ ] or [ $\gg$ ] button to select "TV DIVER".
- Turn the [ROTARY] knob clockwise to set to "ON" or counterclockwise to set to "OFF".
  - ON:**  
Sets reception emphasizing the visual.
  - OFF:**  
Sets the diver setting to OFF.
- Press the [T] button to return to the previous mode.

# 9. TROUBLESHOOTING

	<b>Problem</b>	<b>Cause</b>	<b>Measure</b>
General	Power does not turn on. (No sound is produced.)	Fuse is blown.  Incorrect wiring.	Replace with a fuse of the same amperage. If the fuse blows again, consult your store of purchase.  Consult your store of purchase.
	No sound output when operating the unit with amplifiers.	Amplifier turn-on lead is shorted to ground or excessive current is required.	Turn the unit off and check each wire for a possible short. If the amplifier turn-on lead shorts out, cover it with insulation such as tape.
	Nothing happens when buttons are pressed.	The microprocessor has malfunctioned due to noise, etc.	Turn off the power, then press the [RELEASE] button and remove the DCP. Press the reset button for about 2 seconds with a thin rod.
	Display is not accurate	DCP or source unit connectors are dirty.	Wipe the dirt off with a soft cloth moistened with cleaning alcohol.
	No audio.	The speaker protection circuit is operating.	<ol style="list-style-type: none"> <li>Check the speaker connection.</li> <li>Turn down sound volume. Function can also be restored by turning the power off and on again.</li> <li>If the sound is muted again, consult your store of purchase.</li> </ol>
CD	Compact disc cannot be loaded.	Another compact disc is already loaded.	Eject the compact disc before loading the new one.
	Sound skips or is noisy.	Compact disc is dirty.	Clean the compact disc with a soft cloth.
		Compact disc is heavily scratched or warped.	Replace with a compact disc with no scratches.
CeNET	Sound is bad directly after power is turned on.	Water droplets may form on the internal lens.	Let dry for about 1 hour with the power on.
	Source selection does not recognize CeNET source connection.	The microprocessor has not stored the proper CeNET information.  The CeNET cable is not connected properly.	Perform a system check. See " <b>Operations Common to Each Mode</b> ", performing a system check section.  Ensure the CeNET cables are properly connected.

# 10. ERROR DISPLAYS

If an error occurs, one of the following displays is displayed.

Take the measures described below to eliminate the problem.

	Error Display	Cause	Measure
CD	<b>ERROR 2</b>	A CD is caught inside the CD deck and is not ejected.	This is a failure of CD deck's mechanism. Consult your store of purchase.
	<b>ERROR 3</b>	A CD cannot be played due to scratches, etc.	Replace with a non-scratched, non-warped-disc.
	<b>ERROR 6</b>	A CD is loaded upside-down inside the CD deck and does not play.	Eject the disc, then reload it properly.
CD changer	<b>ERROR 2</b>	A CD inside the CD changer is not loaded.	This is a failure of CD changer's mechanism. Consult your store of purchase.
	<b>ERROR 3</b>	A CD inside the CD changer cannot be played due to scratches, etc.	Replace with a non-scratched, non-warped disc.
	<b>ERROR 6</b>	A CD inside the CD changer cannot be played because it is loaded upside-down.	Eject the disc, then reload it properly.

If an error display other than the ones described above appears, press the reset button. If the problem persists, turn off the power and consult your store of purchase.

# 11. SPECIFICATIONS

## Source unit harness wire connections

Wire Color	Function
Yellow	+12V DC Constant Power Source/Memory
Red	+12V DC Switch Lead/Accessory
Black	Ground
Blue/White	Amplifier Remote Turn-on
Grey	Right Front Speaker (+)
Grey/Black	Right Front Speaker (-)
White	Left Front Speaker (+)
White/Black	Left Front Speaker (-)
Purple	Right Rear Speaker (+)
Purple/Black	Right Rear Speaker (-)
Green	Left Rear Speaker (+)
Green/Black	Left Rear Speaker (-)

## RCA Connections

Wire Color	Function
Grey/Red	Right Front Line Level Output (Full range)
Grey/White	Left Front Line Level Output (Full range)
Black/Red	Right Rear Line Level Output (Full range or Sub woofer)
Black/White	Left Rear Line Level Output (Full range or Sub woofer)
Red/Red	Right Auxiliary Input
Red/White	Left Auxiliary Input

## FM Tuner

Frequency Range:

U.S.A : 87.9 MHz to 107.9 MHz

Europe : 87.5 MHz to 108.0 MHz

Australia : 87.0 MHz to 108.0 MHz

Usable Sensitivity: 9 dBf

50dB Quieting Sensitivity: 15 dBf

Alternate Channel Selectivity: 70 dB

Stereo Separation (1 kHz): 35 dB

Frequency Response ( $\pm 3$  dB): 30 Hz to 15 kHz

## AM Tuner

Frequency Range:

U.S.A : 530 kHz to 1710 kHz

Europe : 531 kHz to 1602 kHz

Australia : 531 kHz to 1629 kHz

Usable Sensitivity: 25  $\mu$ V

## CD Player

System: Compact disc digital audio system

Usable Discs: Compact disc

Frequency Response ( $\pm 1$  dB): 10 Hz to 20 kHz

Signal to Noise Ratio (1 kHz): 100 dB

Dynamic Range (1 kHz): 95 dB

Harmonic Distortion: 0.01%

## Audio

Maximum Power Output: 208 W (52 W X 4 ch)

Continuous Average Power Output:

17 W X 4, into 4  $\Omega$ , 20 Hz to 20 kHz, 1%THD

Bass Control Action (60 Hz/100 Hz/200 Hz):  
 $\pm 15$  dB

Treble Control Action (10 kHz/15 kHz):  $\pm 12$  dB

Line Output Level (CD 1 kHz): 2 V

## General

Power Supply Voltage: 14.4 V DC

(10.8 to 15.6 V allowable), negative ground

Current Consumption: Less than 15 A

Speaker Impedance: 4  $\Omega$  (4  $\Omega$  to 8  $\Omega$  allowable)

Weight / Source unit: 2.64 lb. (1.2 kg)

Dimensions / Source unit:

7" (Width) X 2" (Height) X 6-1/8" (Depth)  
[178 (W) X 50 (H) X 155 (D) mm]

## Note:

- Specifications and design are subject to change without notice for further improvement.



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